

MATERIAL SAFETY DATA SHEET

1. Chemical Product and Company Identification

1.1. Product name

IRMCO® 980 230

Other designation : IRMCO FLUIDS® 980 230

1.2. Main use

WATER-BASED FLUID METALWORKING LUBRICANT

1.3. Company identification

Manufacturer:

**IRMCO
2117 Greenleaf Street
Evanston, IL USA 60202-1088
001 847 864 0255 phone
001 847 864 0012 fax**

Licensed Importer and Distributor for Europe:

**IRMCO EUROPE srl
Head office: P.za Galimberti 1 – 12100 CUNEO
Plant & Office : Reg. Conti – 10060 GARZIGLIANA (TO)
www.irmcoeurope.com**

1.4. Emergency calls

+ 39 0171 1825170

2. Composition/Information on Ingredients

2.1. Mixture

Component	Identification	CAS NUMBER	% weight
Triethanolamine (TEA)	Xi	102-71-6	35

2.2. The product is not considered like a substance dangerous as Law 1999/45/CE

2.3. The product does not contain any substance or product included in the 28°th Conforming CEE. The product contain a substance like:

- o **triethanolamine** (CAS 102-71-6): Xi - R36/38 (Irritating eyes and skin)

2.4. The product isn't classified as Law 93/32/CE – 1999/45/CE - 2001/58/

2.5.

Componente	CAS
Triethanolamiine (TEA)	102-71-6

2.6. Are not present any substances, under the Art. 15 Law 1999/45/CE or referred to the point 2.3 of the present document it's presence need to be kept secret.

3. Hazard Information

Main environment and health risks :

- May cause irritation of eyes, respiratory tract and skin.
- The material is inert.
- It doesn't contain any mineral oil and hydrocarbon policiclic aromatic (IPA)

4. First Aid Measures

- *Eye contact:*
Clean with flooding amount of water.
- *Skin Contact:*
Wash with water.
- *Inhalation:*
Remove exposed person to fresh air and if necessary consult a physician.
- *Ingestion:*
Do not induce vomiting. If necessary after a first aid consult a physician.
- *Note to Physicians:*
None specific recommendations .

5. Fire Fighting Measures

- *Fire or Explosion Hazards:*
Container may rupture if subject to high temperature under pressure.
- *Fire –Fighting Equipment:*
Carbon dioxide, dry chemical foam, foam, or water fog or fine spray.

6. Accidental Release Measures

- *Spill/Leak Procedures:*
Wet the material with water and collect it on the floor. For disposal information see point 13.
- *Body and personal instruction:*
None.

- *Cleaning method of the area:*
Wash the area contaminated with water and collect the polluted liquid for disposal.

7. Handling and Storage

7.1. *Handling precautions*

Use with adequate ventilation.

7.2. *Storage Requirement*

Store in closed containers in a cool, dry, well-ventilated area.
Do not store outside as product may freeze

7.3. *Specific applications*

N.A.

8. Personal Protection/Exposure controls

8.1. *Exposure limits data*

Component	TLV-TWA
Triethanolamine (TEA)	5 mg/m ³

8.2. *Exposure controls*

8.2.1. *Exposure controls industrial application*

Follow European State Laws where the product is in use concerning Respiratory Protection for a water based product containing TEA

8.2.1.1. *Respiratory protection*

No respiratory protection should be needed.

8.2.1.2. *Hands protection*

Many gloves can be used

8.2.1.3. *Eyes protection*

Wear eyes protection if the process could create sprinkling.

8.2.1.4. *Skin protection*

Wear protective apron if the process could create sprinkling

8.2.2. *Environment exposure controls*

N.A.

9. Physical and Chemical Properties

9.1. General Information

- *Appearance:*
Fluid clear light to dark amber.
- *Odor:*
Bland.

9.2. Health, Safety and Environmental Important information

<i>Ph</i>	10,0 ÷ 10,0
<i>Boiling Point</i>	Approximately 100°C
<i>In flammability Point</i>	N.A.
<i>In flammability (solid, gas)</i>	N.A.
<i>Explosion proprieties</i>	N.A.
<i>Burning proprieties</i>	N.A.
<i>Vapour Pressure</i>	N.A.
<i>Density</i>	1084,86 Kg/m ³
<i>Solubility in water</i>	Soluble
<i>Solubility in fat (solvent/fat)</i>	N.A.
<i>Factor Octane/water</i>	N.D.
<i>Viscosity (Cst or Cps at 40°C)</i>	57,86
<i>Vapour Density</i>	N.A.
<i>Evaporating rate</i>	Like water

9.3 Other information

<i>Freezing/Melting point</i>	Approximately 0°C
<i>Specific gravity</i>	1,07 – 1,08
<i>Refractive Index</i>	13,9 to 3:1
<i>Miscibility</i>	N.D.
<i>Conductivity</i>	N.D.
<i>Point/fusion break</i>	N.A.
<i>Self burning temperature</i>	N.D.

10. Stability and Reactivity

The product is stable at room temperature in closed containers under normal storage and handling conditions.

10.1. Conditions to Avoid

Avoid high heat unless proper ventilation is provided.

10.2. Chemical Incompatibilities

Incompatible with strong oxidizing agents and strong acids. Avoid mixing with nitrites or nitrosating agents.

10.3. Hazardous Decomposition Products

N.A.

11. Toxicology Information

General Information on the product:

- Skin effects : light irritation
- Inhalation Effects : light irritation
- Eye effects : light irritation
- Lung no
- Other no

Effects at long term for daily exposure:

N.A.

12. Ecological Information

Ecological specific information are not present on the product . Do not leave the material in the territory.

12.1. Ecotoxicity

Water toxicity: not identified

12.2. Mobility

N.A.

12.3. Persistency and degradability

N.A.

12.4. Bio - accumulation power

N.A.

12.5. Other against effects

N.A.

13. Disposal Consideration

This product is not listed/classified as a hazardous waste. Follow applicable federal, state and local laws and regulations. Contact licensed contractor.

European classification:

12.01.99 **waste material non identify** (waste products coming from working surface process above metal and plastic)

14. Transport Information

This product is not regulated by any mean of transportation. This product is not under the norms ADR

15. Regulatory Information

Label	<i>Xi</i>
Phrases R	<i>R36/R37/R38 (Irritating eyes, inhalation and skin)</i>
Phrases S	<i>S14/S24/S25</i>
CEE Norms	Where the product is involved we apply the following norms: <ul style="list-style-type: none">- 91/155/CEE- 93/112/CEE- 1999/45/CE..for classification, packaging and labelling dangerous materials- 2001/58/CE for the way of information about substance and mixed products in the EU market"- 2001/60/CE- 67/548/CEE – Norm 2004/74/CE- 1907/2006CE 18 December 2006 – (REACH)

Export REGULATION

European Inventory of Existing Commercial Chemical Substance (EINCS) = YES

16. OTHER INFORMATION

The information and recommendations contained here in are based upon data believed to be correct. However, no guarantee or warranty of any kind-expressed or implied is made with respect to the information contained here in. Regulatory requirements are subject to change and may differ from one location to another. It's the buyer responsibility to ensure that its activities comply with the European Laws. IRMCO and IRMCO EUROPE are not responsible for injury, loss or damage, direct or consequential, arising from the use or inability to use this product. Before using the product suitability and intended use should be verified. User assumes all risk and liabilities associated with the use of the product.

Glossary:

CAS = Chemical Abstract Service

TWA= Time-weighted Average

N.A. = Not Applicable

N.D. = Not Determinated